87045 LIMOGES Cedex
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2 analogue outputs module for 4 120 53

Cat. N°: 4 120 60



Contents **Pages**

1. Description - Use.....1
2. Range.....1
3. Overall dimensions.....1
4. Preparation - Connection.....1
5. General characteristics.....2
6. Compliance and approvals.....2

1. DESCRIPTION - USE

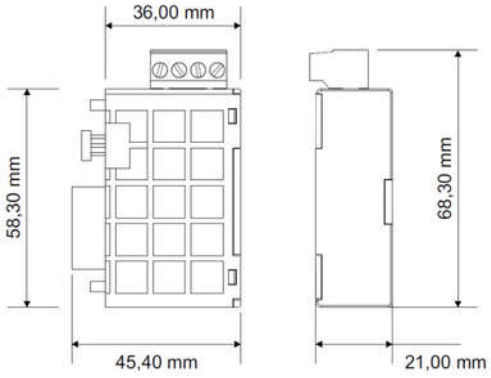
2 analogue outputs module.
Allows the remote repetition, via analogue signal 0÷20 mA et/or 4÷20 mA of two electrical quantities.

2. RANGE

. Cat. N° 4 120 60: 2 analogue outputs module, 0/4 ÷ 20 mA; associable only to multifunction measuring device 4 120 53.
. It is possible to connect a maximum of two modules 4 120 60 obtaining four analogue outputs.

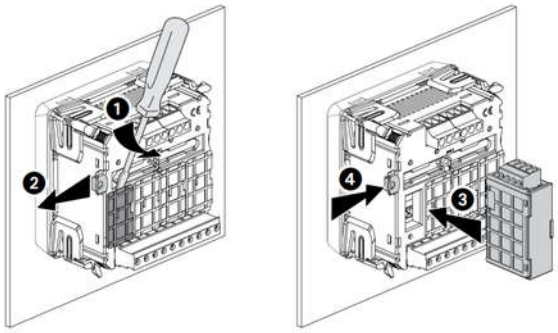
Auxiliary supply:
. Supplied by the multifunction measuring device 4 120 53

3. OVERALL DIMENSIONS



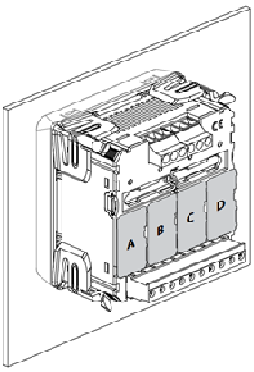
4. FIXING - CONNECTION

Fixing:



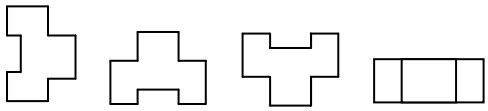
Note: modules must be connected with the device 4 120 53 not supplied.

Associability table:



	A	B	C	D	
4 120 55	✓	×	×	×	max. 1
4 120 56	✓	×	×	×	max. 1
4 120 57	×	×	✓	✓	max. 2
4 120 58	×	×	×	✓	max. 1
4 120 59	✓	✓	✓	✓	max. 2
4 120 60	×	×	✓	✓	max. 2
4 120 61	×	✓	×	×	max. 1

Operating position:
. Vertical Horizontal Upside down On the side



4. FIXING - CONNECTION *(continued)*

Screw terminals:
. Terminal depth: 8 mm.
. Stripping length: 8 mm

Screw head:
. Screw slotted.

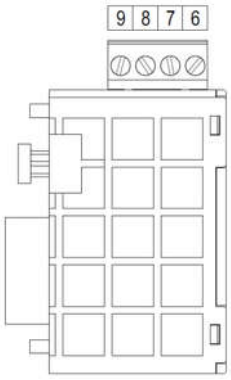
Recommended tightening torque:
. 0,6 Nm.

Tools required:
. For terminals: flat screwdriver 3,5 mm
. For fixing the modules to the measuring device: flat screwdriver max. 5 mm.

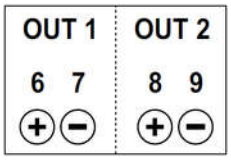
Connectable section:
. Copper cables.

	Without ferrule	With ferrule
Rigid cable	**0,05 to 4,5 mm²**	-
Flexible cable	**0,05 to 2,5 mm²**	**0,05 to 2,5 mm²**

Wiring diagrams:
. Terminals identifications

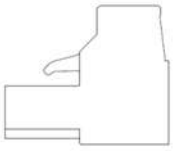


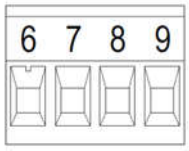
. Wirings



5. GENERAL CHARACTERISTICS

Terminals marking:
. By permanent ink pad printing.





5. GENERAL CHARACTERISTICS *(continued)*

Variables associable to the analogue output:
. Phase voltages, V1N, V2N, V3N
. Chained voltages, U12, U23, U31
. Phase currents, I1, I2, I3
. Current - average value
. Frequency, f
. Three-phase active power (positive or negative), P
. Phase active powers (positive or negative), P1, P2, P3
. Three-phase reactive power (positive or negative), Q
. Phase reactive powers (positive or negative), Q1, Q2, Q3
. Active power - average value
. Reactive power - average value
. Lagging (PFL) or capacitive (PFC) power factor
. Temperature (T1, T2) from external probe (with module 4 120 58)

Analogue output's characteristics:
. Type: unidirectional at real or figurative zero for variable output load
. Rated values: 0÷20 mA or 4÷20 mA
. Response time: ≤ 600 ms
. Output load: ≤ 750 Ω

Accuracy class:
. cl: 0,5

Plastic material:
. Self-extinguishing polycarbonate.

Ambient operating temperature:
. Min. = - 5 °C Max. = + 55 °C.

Ambient storage temperature:
. Min. = - 25 °C Max. = + 70 °C.

Impulse withstand voltage:
. Supply / Out 1 - Out 2:
alternate current 50 Hz / 1 min.: 2 kV
. Measuring inputs / Out 1 - Out 2:
alternate current 50 Hz / 1 min.: 2 kV

Note: values referred to combination measuring device + add-on module.

Average weight per device:
. 0,040 kg.

Volume when packed:
. 0,30 dm^3

Consumption:
. Module 4 120 60: ≤ 2 VA
. Measuring device 4 120 53 + 1 Module 4 120 60: ≤ 6 VA
. Measuring device 4 120 53 + 2 Modules 4 120 60: ≤ 8 VA

6. COMPLIANCE AND APPROVALS

Compliance to standards:
. Compliance with Directive on electromagnetic compatibility (EMC) n° 2004/108/EC
. Compliance with low voltage directive no. 73/23/CEE dated 19 February 1973, modified by directive no. 93/68/CEE dated 22 July 1993, modified by directive n° 2006/95/CE.